

BEFORE THE DEPARTMENT OF ENVIRONMENTAL QUALITY
OF THE STATE OF MONTANA

In the matter of the amendment of ARM)	NOTICE OF PUBLIC HEARING ON
17.56.502, 17.56.507, 17.56.604,)	PROPOSED AMENDMENT AND
17.56.607, and 17.56.608, and the adoption))	ADOPTION
of New Rule I pertaining to reporting and)	
numbering petroleum releases)	(UNDERGROUND STORAGE
)	TANKS)

TO: All Concerned Persons

1. On November 28, 2007, at 10:30 a.m., a public hearing will be held in Room 112, 1100 North Last Chance Gulch, Helena, Montana, to consider the proposed amendment and adoption of the above-stated rules.

2. The department will make reasonable accommodations for persons with disabilities who wish to participate in this public hearing or need an alternative accessible format of this notice. If you require an accommodation, contact the department no later than 5:00 p.m., November 19, 2007, to advise us of the nature of the accommodation that you need. Please contact Mike Trombetta, Bureau Chief, Hazardous Waste Site Cleanup Bureau, Department of Environmental Quality, P.O. Box 200901, Helena, Montana 59620-0901; phone (406) 841-5045; fax (406) 841-5050; or e-mail mtrombetta@mt.gov.

3. The rules proposed to be amended provide as follows, stricken matter interlined, new matter underlined:

17.56.502 REPORTING OF SUSPECTED RELEASES (1) Owners and operators, any person who installs or removes an UST, or who performs subsurface investigations for the presence of regulated substances, and any person who performs a tank tightness or line tightness test pursuant to ARM 17.56.407 or 17.56.408, must report suspected releases to a person within the Remediation Division of the department and the implementing agency or to the 24-hour Disaster and Emergency Services officer available at telephone number (406) 841-3911 within 24 hours of discovery of the existence of any of the following conditions:

- (a) through (i) remain the same.
- (j) analytical results from ~~contaminated~~ soils samples that exceed ~~50~~ 200 milligrams per kilogram for extractable petroleum hydrocarbons (EPH).
- (2) remains the same.

AUTH: 75-11-319, 75-11-505, MCA
IMP: 75-11-309, 75-11-505, MCA

REASON: The amendment at (1)(j) will increase the soil EPH level triggering the requirement to report a suspect release from greater than 50 milligrams per kilogram to greater than 200 milligrams per kilogram. This amendment is necessary

to incorporate revisions to Montana Tier 1 Risk-based Corrective Action Guidance for Petroleum Releases (RBCA) adopted at ARM 17.56.507. As explained in the reason for the amendment to ARM 17.56.507, the updated EPH level reflects new Risk Based Screening Levels (RBSLs) calculated to address unacceptable risk, while not requiring further corrective action that results in little increased protection to human health and the environment. RBCA adopts default Risk-based Screening Levels (RBSLs) to determine if a release has occurred at a site. These default RBSLs apply to the entire soil column and always apply in the absence of adequate information at a potential release site. Upon the effective date of these rules, the 200 ppm screening level for soil EPH compounds will be used to determine whether a suspect release is present. Soil samples exceeding the 200 ppm EPH screening level must be fractionated to determine whether an RBSL is exceeded.

17.56.507 ADOPTION BY REFERENCE (1) For purposes of this subchapter, the department adopts and incorporates by reference:

- (a) remains the same.
- (b) Montana Tier 1 Risk-based Corrective Action Guidance for Petroleum Releases (RBCA) (October ~~2003~~ 2007);
- (c) through (3) remain the same.

AUTH: 75-11-319, 75-11-505, MCA

IMP: 75-11-309, 75-11-505, MCA

REASON: Montana Tier 1 Risk-based Corrective Action Guidance for Petroleum Releases (RBCA) is a document published by the Montana Department of Environmental Quality, Remediation Division. Risk-based Screening Levels (RBSLs) listed in RBCA are used to evaluate whether concentrations of listed contaminants pose an unacceptable risk to public health or the environment given generic assumptions about the contaminated media and exposure scenarios. The levels in RBCA have been recently revised.

The 2007 revisions to RBCA incorporate revisions to the RBSLs contained in RBCA (October 2003 edition). The proposed revisions to RBCA fall into six categories: (1) updates to the application of volatilization factors. DEQ is now utilizing the same approach as EPA Region 9 for its preliminary remediation goals (PRGs). Volatilization factors are applied to those chemicals having a Henry's Law constant greater than 10^{-5} (atm-m³/mol) and a molecular weight less than 200 g/mole; (2) updates to the calculation of dermal factors related to soil exposure; (3) updates of toxicity factors for some of the petroleum fractions as well as toluene; (4) minor corrections and changes to the direct contact spreadsheets based upon current guidance and policy; (5) updates related to Department Circular DEQ-7 including recalculation of RBSLs based on the risk of soil contaminants leaching to ground water; and (6) addition of RBSLs for lead scavengers ethylene dibromide (EDB) and 1,2 dichloroethane (1,2 DCA). Lead scavengers were added to leaded gasoline to help volatilize tetraethyl lead to prevent it from fouling internal combustion engines. EDB and 1,2 DCA may still be found in leaded aviation gasolines. EDB and 1,2 DCA are carcinogens and are persistent in the environment.

These revisions to RBCA require cleanup of petroleum releases to RBSLs which address unacceptable risks to human health and the environment. Because current information suggests that higher RBSLs for some compounds are still protective of human health and the environment, many of the revised RBSLs are less conservative than levels adopted in the October 2003 RBCA, and will result in resolution of some petroleum releases where further expenditure would result in little increased protection for public health, safety, or the environment.

This amendment is necessary to incorporate the updated levels so that owners and operators of petroleum storage tanks and the department can properly evaluate the potential risk a release poses to public health or the environment without conducting a complete site-specific risk assessment. Additionally, RBCA is updated regularly as new information becomes available. Once the updated version of RBCA goes into effect, the prior versions are not available to the public. It is necessary to adopt the latest version of RBCA to avoid confusion over the applicable screening levels that trigger release reporting.

Copies of RBCA, with the proposed revisions may be obtained by contacting Mike Trombetta, Hazardous Waste Site Cleanup Bureau, Bureau Chief, Department of Environmental Quality, P.O. Box 200901, Helena, Montana 59620-0901, (406) 841-5000; or at <http://deq.mt.gov/rem/hwc/rbca/LinksTOC.asp>.

17.56.604 REMEDIAL INVESTIGATION (1) and (2) remain the same.

(3) A remedial investigation generally is an expanded site assessment more detailed in scope than the initial response and abatement measures under ARM 17.56.602, which must define the nature, extent, and magnitude of contamination and identify threats to public health, welfare, and to the environment. A remedial investigation work plan must be submitted to the department prior to implementation by the owners and operators. The department shall submit a copy of a work plan from any owner or operator who is or may be seeking reimbursement to the appropriate local government office with jurisdiction over corrective action of the release. The office shall respond with any comments within 15 days of receipt of the plan and the department shall approve or disapprove the plan within 15 days of receipt from the local government. The following information is required to complete the remedial investigation:

- (a) through (e) remain the same.
- (f) technical conclusions, which must be stated with reasonable professional certainty and under the standard of care applicable, must include at least:
 - (i) remains the same.
 - (ii) current extent of and potential for the release (determined with field or laboratory analytical detection equipment) in or through the following media:
 - (A) remains the same.
 - (B) free product; ~~aerial~~ areal extent;
 - (C) through (4) remain the same.

AUTH: 75-11-319, 75-11-505, MCA

IMP: 75-11-309, 75-11-505, MCA

REASON: The amendment to (3)(f)(ii)(B) is necessary to correct the intended meaning of the rule by replacing the word "aerial" with the word "areal." This amendment is not substantive, but will correct the mistaken use of the word "aerial," which did not make sense in the context of the rule.

17.56.607 RELEASE CATEGORIZATION (1) through (3) remain the same.

(4) The department may categorize a release as resolved if the department has determined that all cleanup requirements have been met and that conditions at the site ensure present and long-term protection of human health, safety, and the environment. The following requirements must also be met before a release may be categorized as resolved:

(a) remains the same.

(b) risks to human health, safety, and the environment from residual contamination at the site have been ~~elevated~~ evaluated using methods listed in (4)(b)(i) or (ii) and the evaluation indicates that unacceptable risks do not exist and are not expected to exist in the future. The department considers a total hazard index that does not exceed 1.0 for noncarcinogenic risks, and a total cancer risk that does not exceed 1×10^{-5} , to be an acceptable risk level. Owners or operators, or other persons may, with department approval, use either of the following methods to evaluate risks from a release:

(i) through (9)(g) remain the same.

AUTH: 75-11-319, 75-11-505, MCA

IMP: 75-11-309, 75-11-505, MCA

REASON: The amendment to (4)(b) is necessary to correct the intended meaning of the rule by replacing the word "elevated" with the word "evaluated." This amendment is not substantive, but will correct the mistaken use of the word "elevated," which did not make sense in the context of the rule.

17.56.608 ADOPTION BY REFERENCE (1) For purposes of this subchapter, the department adopts and incorporates by reference:

(a) Department Circular ~~WQB~~ DEQ-7, "Montana Numeric Water Quality Standards" (~~January 2004~~ February 2006);

(b) remains the same.

(c) Montana Tier 1 Risk-based Corrective Action Guidance for Petroleum Releases (RBCA) (~~October 2003~~ 2007); and

(d) through (3) remain the same.

AUTH: 75-11-319, 75-11-505, MCA

IMP: 75-11-309, 75-11-505, MCA

REASON: Department Circular DEQ-7, "Montana Numeric Water Quality Standards" (February 2006), is a document published by the Montana Department of Environmental Quality, Planning, Prevention, and Assistance Division, Water Quality Standards Section and adopted by the Board of Environmental Review. Department Circular DEQ-7 contains numeric water quality standards and trigger values for

contaminant levels in surface and ground waters. The standards and trigger values contained in Department Circular DEQ-7 are designed to protect the current and future use of surface and ground waters in the state of Montana. Department Circular DEQ-7 is used by DEQ as a regulatory standard for cleanup levels of listed contaminants in state waters.

Department Circular DEQ-7 is updated regularly as new information becomes available. It is necessary to amend ARM 17.56.608 to adopt the latest version of Department Circular DEQ-7 because a petroleum storage tank release cannot be resolved until contaminant concentrations in impacted waters are reduced to levels below numeric standards listed in Department Circular DEQ-7.

Seventy-three water quality standards were revised in the February 2006 update to Department Circular DEQ-7. Most significant for remediation of petroleum release sites are revised standards for Polycyclic Aromatic Hydrocarbons (PAHs) including: Benz[a]anthracene; Benzo[b]fluoranthene; Benzo[k]fluoranthene; Chrysene; Dibenzo[a,h]anthracene; and Indeno[1,2,3-cd]pyrene.

The revisions to Department Circular DEQ-7, reflected in the October 2007 RBCA, required recalculation of Risk-based Screening Levels (RBSLs) in Montana Tier 1 Risk-based Corrective Action Guidance for Petroleum Releases (RBCA). The revised RBSLs are based on the risk of soil contaminants leaching to ground water.

The adoption of the revised Department Circular DEQ-7 is necessary to ensure that water quality standards relied upon for cleanup of petroleum releases are consistent with the standards adopted by the board. It is necessary to adopt the latest version of Department Circular DEQ-7 so owners and operators can identify accurate risks posed from petroleum storage tank releases. Once the updated version of Department Circular DEQ-7 goes into effect, the prior versions are not available to the public. It is necessary to adopt the latest version of Department Circular DEQ-7 to avoid confusion over the applicable cleanup standards for petroleum releases.

The revisions to RBCA adopted in this rule and the reasons for them are summarized in the reason for ARM 17.56.507.

4. The proposed new rule provides as follows:

NEW RULE I. NUMBERING PETROLEUM RELEASES (1) The department shall assign each confirmed petroleum release from a petroleum storage tank a unique identification number. Except as provided in (2), from the date of discovery of a confirmed release of petroleum from a petroleum storage tank at a facility, all contamination from petroleum storage tanks subsequently discovered through any investigative or corrective action in response to the previously confirmed and numbered release pursuant to subchapter 5 or 6, is considered "one release" and part of the previously confirmed and numbered release.

(2) Under the following circumstances the department shall confirm a separate release and assign another release identification number to petroleum contamination from a petroleum storage tank at a facility that has a previously confirmed and numbered release:

(a) when a separate release from a petroleum storage tank is discovered at a facility and, based on substantial evidence, the department finds the release began

after the department categorized all earlier confirmed releases at the facility as resolved in accordance with ARM 17.56.607(4);

(b) when, based on substantial evidence, the department finds that there is a separate release of petroleum from a petroleum storage tank at a facility that began after any previously confirmed and numbered release was discovered; or

(c) when additional contamination from a petroleum storage tank is discovered and, based on substantial evidence, the department finds that the contamination originated from a petroleum storage tank or tanks at a different facility than the facility where the previously confirmed and numbered release occurred.

(3) For the purposes of this rule only, "facility" means any one or a combination of petroleum storage tanks that are located on contiguous property and owned and operated as a single business by the same person(s), at the time a confirmed release is discovered. A facility does not include petroleum storage tanks used in different businesses, or owned by different persons, and connected through permanent or temporary piping used to transfer petroleum products from one business to another at the time a confirmed release was discovered.

(4) "Petroleum storage tank" has the meaning provided in 75-11-302, MCA.

(5) The department may rescind a release number if the department determines that the release should not have been confirmed. This determination must be based on substantial evidence upon which the department may conclude that the release did not occur, that the contamination did not exceed standards cited in ARM 17.56.506, or that the contamination does not meet the criteria set forth in (2) and should have been attributed to an earlier confirmed release that has been assigned a release number.

AUTH: 75-11-319, 75-11-505, MCA

IMP: 75-11-308, 75-11-309, 75-11-505, MCA

REASON: New rule I describes the way that the department assigns unique release identification numbers to petroleum releases. The methodology in this rule adopts, in department administrative rules, the informal guidelines for release identification that the department has operated under since 1989. The department determined that it was necessary to formalize these guidelines in order to ensure their consistent application and to give the regulated community notice of the department's process for determining and identifying petroleum releases. Except as provided in (2), under (1), all petroleum contamination from petroleum storage tanks at a facility found during investigation and cleanup of a confirmed and numbered release is considered part of the previously confirmed and numbered release.

Section (2) clarifies when the department may assign a new release number to a petroleum release from petroleum storage tanks at a facility with an earlier, confirmed release. Under (2), an additional release number may be assigned at a facility with a previously confirmed release in the limited circumstances where the new release occurred after the earlier release has been resolved, when a new release from petroleum storage tanks begins after the date the active release was discovered, or when petroleum contamination is found to originate from a different facility. Under this rule, historic contamination found at a facility where a release has previously been confirmed will not be considered a new or separate release. All

historic contamination discovered at a facility during investigative and corrective actions to address a confirmed release are attributed to, and incorporated within, the previously confirmed release. This is consistent with insurance industry practice to consider all contamination discovered during a site investigation to be "one occurrence" or "one release."

New rule I defines the terms "facility," at (3), and "petroleum storage tank," at (4). It is necessary to define these terms in the rule to assist the department and the public in interpreting and applying the proposed rule.

Section (5) describes when the department may rescind a release number. The department determined it is necessary to formally adopt, in administrative rules, the process for rescinding release numbers in order to ensure consistent application and provide notice to the regulated community.

5. Concerned persons may submit their data, views, or arguments, either orally or in writing, at the hearing. Written data, views, or arguments may also be submitted to Kirsten Bowers, Special Assistant Attorney General, Remediation Division, Department of Environmental Quality, P.O. Box 200901, Helena, Montana 59620-0901; phone (406) 841-5021; fax (406) 841-5050; or e-mail to kbowers@mt.gov, no later than December 6, 2007. To be guaranteed consideration, mailed comments must be postmarked on or before that date.

6. Kirsten Bowers, attorney, has been designated to preside over and conduct the hearing.

7. The department maintains a list of interested persons who wish to receive notices of rulemaking actions proposed by this agency. Persons who wish to have their name added to the list must make a written request that includes the name, e-mail, and mailing address of the person to receive notices and specifies that the person wishes to receive notices regarding: air quality; hazardous waste/waste oil; asbestos control; water/wastewater treatment plant operator certification; solid waste; junk vehicles; infectious waste; public water supplies; public sewage systems regulation; hard rock (metal) mine reclamation; major facility siting; opencut mine reclamation; strip mine reclamation; subdivisions; renewable energy grants/loans; wastewater treatment or safe drinking water revolving grants and loans; water quality; CECRA; underground/above ground storage tanks; MEPA; or general procedural rules other than MEPA. Notices will be sent by e-mail unless a mailing preference is noted in the request. Such written request may be mailed or delivered to Elois Johnson, Paralegal, Legal Unit, 1520 E. Sixth Ave., P.O. Box 200901, Helena, Montana 59620-0901, faxed to the office at (406) 444-4386, e-mailed to ejohnson@mt.gov, or may be made by completing a request form at any rules hearing held by the department.

8. The bill sponsor notice requirements of 2-4-302, MCA, do not apply.

Reviewed by:

DEPARTMENT OF ENVIRONMENTAL
QUALITY

/s/ James M. Madden
JAMES M. MADDEN
Rule Reviewer

/s/ Richard H. Oppen
RICHARD H. OPPER, Director

Certified to the Secretary of State, October 29, 2007.